Verstegen White pepper Bangka, Indonesia

Development stage:

Definition — Design — Financing — Implementation — **Maintenance**

The goal of this project is to develop an economically viable Regenerative Agroforestry white-pepper system that generates ecosystem services & positive social impact for farmers. This is the first pilot in a longer-term strategy to spread uptake of agroforestry amongst over 500 of Bangka's pepper farmers.

reNature has designed, helped planting, and organized multiple workshops for the farmers and local community.

Location:
Bangka Island, Indonesia

Size of planted plot (ha):
1,2 ha

Size of potential area (ha)
500 ha

Client:
Verstegen Spices

Commodity:
White pepper

Industry:
Food

Goal:
Stable white pepper yields and system resilience

Main focus:
Economical Viability

Partners:
PT CAN, Indonesia
52Impact, the Netherlands

Finance & Planning

Investment
N/A

Initiator
Verstegen Spices

Assignment & Impact

Number of direct Beneficiaries

30 farmers, families and community members

Development Challenge

A combination of soil degradation, disease pressure, declining pepper prices and changing climate are severely impacting the livelihood security of Bangka's pepper farmers. Many are turning to monoculture cultivation of oil palm and rubber, which drives deforestation and exposes them to poor working conditions.

Intervention

The project allows Bangka's farmers to generate income from the crop they have traditionally worked with: white-pepper. This diversified system ensures long-term productivity of pepper plantations whilst providing resilience in the form of alternative income streams. As destructive palm oil & rubber production becomes more economically attractive to Indonesia's farmers, we ensure that white pepper cultivation remains a viable, fulfilling livelihood.

Goal

To share knowledge with Bangka's farmers and create a showcase for a diversified, viable white pepper system that is both replicable at large scale and flexible according to the farmer's needs.
This will increase livelihood security, and to inspire the spice industry about the productive potential of Regenerative Agroforestry.

Finantial Details

N/A

Inspirational Impact

The farmers participate in the design process to include crops that they want to consume or sell, so that they feel ownership of the system for the long-term. The farmers and community that visit the farm also see the potential of the system, as well as being inspired by the beauty brought to the landscape.

Environmental Impact

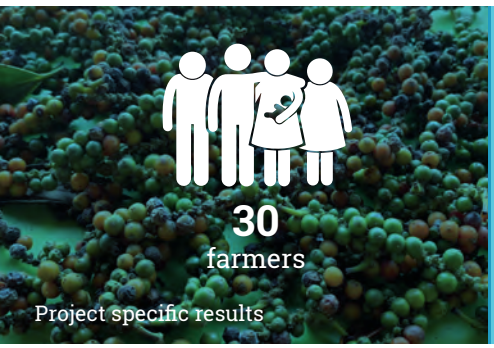
With over 19 different tree species alone, including many natives, the system supports a far more diverse range of life than monocultures. It also does not require destructive artificial inputs, and stores more carbon than monoculture.

Economic Impact

The farmer is protected from declines and fluctuations in the price of pepper because of the additional income streams provided by the system. Furthermore, if Verstegen sees the economic benefits they are willing to scale throughoutt their spice farms globally.

Social Impact

Capacity-building for approximately 30 farmers, with long-term reach to over 500 farmers. Providing food security, improved health, satisfying livelihoods and inspiring the next generation of farmers.



Project specific results

73% more
biodiversity

13% more
soil humidity

12 ton more
CO_2 sequestration per ha/year

General impact of Agroforestry

Metrics

Outcome metrics:

1) Soil organic matter (SOM)
2) Soil moisture compared to adjacent conventional plots (especially in dry periods)
3) pepper yield

Suggested evaluation methods

1) SOM comparison with baseline results
2) Soil moisture during dry periodsc in comparison to adjacent monoculture plots and relative to minimum soil water requirement of pepper
3) Economic modelling in comparison to local monocultures